**Abalsia Hurley**

**Grade Level: Prekindergarten**

**Subject: Science**

**Essential Question:** What happens to waste when you throw it away and what are all of the possible avenues for waste?

**Focus Question:**  Where does waste go when it isn’t reused or recycled?

**Learning Objectives:** Students will discuss where non-recycled garbage goes and learn about the history of New York City’s waste disposal system.

Students will discuss where the garbage goes after it’s thrown away.

Student will engage in a discussion about New York City’s waste disposal history and methods used today.

Students will learn about why it is important to recycle.

Students will learn about the different kinds of things that can be reused.

**Learning Standards: PK.CW. (Science) Observe and describes characteristics of earth and space.**

**PK.CLL.1 (Reading Standards for Informational Text): With prompting and support, ask and answer questions about details in a text.**

**Living Things**

**Demonstrates ways that each person is responsible for protecting our plant (e.g., recycling plastic, glass, and cardboard, reusing, a plastic container sandwich box, mending clothing rather than throwing away etc.)**

**Materials:**

Chart paper

Crayon

Markers

Worksheet

Recycle by Gail Gibbons

Reduce Reuse Recycle You Ready by NYC.gov/recycle

**Vocabulary Words:** decomposition, groundwater, incinerators, landfill, gas, leachate, organic

**Background information:** Students will learn about waste that isn’t reduced, reused, or recycled is either incinerated (burnt to ash or buried in a landfill (a landsite designated for waste burial) Students will learn that an overwhelming amount of garbage in New York City has been a problem since the late 1700s. Students will learn that as the city became more crowded with people it became more difficult to keep up with the disposal of all the waste. Students will learn that much of the garbage was dumped at sea, polluting the water and air, and killing wildlife. As a result the city made some effort to suspend ocean dumping and instituted rules about separating garbage. Landfills were made throughout the five boroughs, but these landfills were not maintained as they should have been and residents complained about the smell and rat infestation.

**Procedures and Timing 15-20mins**

1. Teacher will define the vocabulary words with students. Teacher will provide images for students to view.
2. Students will discuss and make a prediction where do the garbage goes after it’s thrown away.
3. Students will discuss where the waste go when it isn’t reused or recycled.
4. Student’s responses will be recorded on chart paper.
5. Students will listen to a read aloud Recycle by Gail Gibbons.
6. Teacher will discuss with students the importance of why we recycle and how it helps the environment.
7. Students will identify what kinds of things can be recycled. (e.g newspaper, cans, bottle, magazines, soft cover books etc)
8. Student will identify what kinds of things can be reused? (paper, bottle, food & beverages cartoons & drink boxes etc)

**Activity**

1. Students will view several images of where the garbage goes.
2. Students observe and discuss what they see.
3. Teacher will circulate around the classroom and provide support and guidance as needed.
4. Students will draw 4 recycle items in the appropriate categories on the worksheet.
5. Students will draw 4 pictures of objects that can be resued.
6. After completing the activity worksheet students will share their work.

**Follow-up Activity:**

1. Students begin to practice recycling inside of the classroom using the three bins that are located in the classroom. Students and teacher will work together to create different ways that we can reuse the items that we have collected.
2. Teacher will model this concept for students to view.

**Images of where garbage goes** 

**Landfill**

http://www.sustainablesanrafael.org/court-stalls-landfill/



**Incinerator**

http://wnpr.org/post/where-does-all-our-trash-go



**Organic**

**http://oddstuffmagazine.com/terms-of-decomposition-of-garbage-in-photos.ht**



**Leachate**

[**http://leachate.blogspot.com/p/what-is-leachate-landfill-leachaet.html**](http://leachate.blogspot.com/p/what-is-leachate-landfill-leachaet.html)



Groundwater

<https://www.slideshare.net/gauravhtandon1/ground-water-unitv>

**Assessment**

**Students will draw 4 recyclable items in the appropriate categories below:**

|  |  |
| --- | --- |
| **Paper & Cardboard** | **Metals, Glass, Plastic & Cartoons** |
|  |  |

**Students will draw 4 pictures of items that can be reused.**

|  |  |
| --- | --- |
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|  |  |

**Abalsia Hurley Prekindergarten Science Rubric**

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| --- | --- | --- | --- | --- |
| **No Effort**  Image result for images of a smiley face | **Beginner**  Image result for images of a smiley face | **On My Way**  Related image | **Almost There**  Related imageRelated image | **Mastery**  Image result for images of a smiley face |
| **Pictures**  Unfinished Drawings  Scribbles lines with no direction or without creating any pictures | **Pictures:**  Drawing lack detailed  Beginning to put lines together to form figures | **Pictures :**  Add some details in drawing to form an object or picture  Student show evidence of understanding the concept | **Pictures:**  Several details in drawing include arms and legs to form an image/object  Student is able to verbally express some details about his/her drawings | **Pictures:**  Add explicit detailed to his/her drawing  Student is able to very describe his/her drawing in great detail |